

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001549710010-3

SHKONDE, E. I.

Chern ✓ In memoriam, A. F. Tyulin. E. I. Shkonde. *Colloid J.*
(U.S.S.R.) 43, 485-9 (1958) (Russian translation).—See C.A.
51, 182. S.M.R.

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CIA-RDP86-00513R001549710010-3"

SHKONDE, E.I., kandidat sel'skokhozyaystvennykh nauk (Moskva)

In memory of D.N.Prianishnikov. Priroda 45 no.4:112 Ap '56.
(Prianishnikov, Dmitrii Nikolaevich, 1865-1948) (MIRA 9:7)

USSR/Soil Science. Organic Fertilizers

J-4

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 43871

Author : Shkonde E.I.

Inst : Not Given

Title : The Role of Soya Beans in Accumulating Soil Nitrogen

Orig Pub : Udobreniya i urozhay, 1957, No 1, 31-35

Abstract : The results of observations are presented made on the accumulation of dry matter and nitrogen in various parts of soya plants under production conditions in 1953-1954 on peat meadow dark-colored soil in the Amur River region. Plant samples were taken at the time of flowering and the ripening of the beans. In 1953 at the Amur Experimental Station with uniform sowing, the dry mass yield during the flowering stage reached 52.9 centners per 1 ha. with an N content of 145.4 kg., of which 121 were from the roots. The dry mass yield in wide row sowing was somewhat lower with an N content of 90 kg., of which 23.5 kg. were from the roots. In tests made in Blagovechcheniy

Card : 1/2

SHKONDE, E. I., kandidat sel'skokhozyaystvennykh nauk.

Effect of sulfur on the nutrition system of plants. Dokl. Akad.
sel'khoz. 22 no.2:22-25 '57. (MLRA 10:5)

1. Pochvennyy institut Akademii nauk SSSR. Predstavlena akademikom
O. K. Kedrovym-Zikhmanom.
(Plants, Effect of sulfur on)

SHKONDE, E.I.

All-Union Conference on agrachemical methods of soil research.
Pochvovedenie no.2:86-87 p '58. (MIRA 11:3)
(Soil chemistry)

USOVSKIY, B.N., agronom; LINNIK, Ye.F., agronom; PODKAMENNYKH, Yu.M.;
SHKONDE, E.I., kand.sel'skokhoz.nauk; LEVSIUKOV, Yu.M., red.;
TUMARKINA, N.A., tekhn.red.

[Russian-English agricultural dictionary] Russko-angliiskii
sel'skokhoziaistvennyi slovar'. Sost.V.N.Usovskii i dr.
Moskva, Glav.red.inostr.nauchno-tekhn.slovarei Fizmatgiz, 1960.
(MIRA 13:10)
504 p.
(Agriculture--Dictionaries) (Russian language--Dictionaries--English)

SHKONDE, E.I., kand. sel'khoz. nauk; SPICHKIN, I.M., red.; PROKOF'YEVA, L.N., tekhn. red.

[Liquid nitrogen fertilizers and their use; collection of articles translated from foreign periodical literature] Zhidkie azotnye udobreniya i ikh primenenie; sbornik perevodov iz inostrannoi periodicheskoi literatury. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1961. 438 p.
(MIRA 14:7)

(Fertilizers and manures) (Nitrogen compounds)

SHKONDE, E.I.

Work of the Agrochemistry Section at the House of Scientists;
on the 40th anniversary of the House of Scientists, Academy of
Sciences of the U.S.S.R. Pochvovedenie no.9:113-116 S '62.
(MIRA 16:1)
(Soil chemistry--Research)

SERDOBOL'SKIY, I.P.; KHEYFETS, D.M.; FEDOROVSKIY, D.V.; SOKOLOV, A.V.,
doktor sel'khoz. nauk, otv. red.; SHKONDE, E.I., kand. sel'-
khoz. nauk, otv. red.; PAVLOV, A.N., red. izd-va; RYLINA,
Yu.V., tekhn. red.

[Agrochemical characteristics of the soils in the U.S.S.R.]
Agrokhimicheskaya kharakteristika pochv SSSR. Moskva,
Vol.2. [Areas in the Central Chernozem Belt and the Moldavian
S.S.R.] Raiony TSentral'noi chernozemnoi polosy i Moldavskoi
SSR. 1963. 261 p. (MIRA 16:7)

1. Akademiya nauk SSSR. Pochvennyy institut im. V.V. Dokuchayeva.
(Central Chernozem Region--Soils) (Moldavia--Soils)

ALEKSANDROVA, I.V.; DIMO, V.N.; MURATOVA, V.S.; NOGINA, N.A.;
FRESNYAKOVA, G.A.; RAZORENOVA, N.A.; TSERLING, V.V.; SHKONDE, E.I.

Second Congress of Soil Science Delegates. Pochvovedenie
no.1:93-102 Ja '63. (MIRA 16:2)
(Soil research--Congresses)

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SHKONDE, E.I.

The 14th Prianishnikov Lecture. Pochvovedenie no.11:111-113
N '63. (MIRA 16:12)

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CIA-RDP86-00513R001549710010-3"

SOKOLOV, A.V., doktor sel'khoz. nauk, otv. red.; SHKONDE, E.I.,
kand. sel'khoz. nauk, otv. red.

[Agrochemical characteristics of the soils in the U.S.S.R.;
regions of the Urals] Agrokhimicheskaiia kharakteristika pochv
SSSR; raiony Urala. Moskva, Izd-vo "Nauka," 1964. 327 p.
(MIRA 17:6)

1. Akademiya nauk SSSR. Pochvennyy institut im. V.V.Dokuchayeva.

SHKONDE, E. L.; KOROKHOVA, I. Y.

Determining ammonia nitrogen in soil extracts using Indophenol
dyes. Pochvovedenie no. 6:54-60 Je 164 (MTTA 1737)

1. Pochvennyy institut imeni V.V. Dokuchayeva.

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CIA-RDP86-00513R001549710010-3

ASKINAZI, D.L.; VOL'FKOVICH, S.I.; KATALYMOV, M.V.; PETERBURGSKIY, A.V.;
SOKOLOV, A.V.; SHEDEROV, S.G.; SHKONDE, E.I.

In memory of Oskar Karlovich Kedrov-Zikhman. Pochvovedenie
no.7:126-127 Jl '64. (MIRA 17:8)

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CIA-RDP86-00513R001549710010-3"

BALASHEV, L.L., prof.; GRIGOR'YEV, N.G., kand. biol. nauk;
ZHURBITSKIY, Z.I., prof.; PETERBURGSKIY, A.V., prof.;
POPOV, P.V., kand. sel'khoz. nauk; RADKEVICH, P.Ye., prof.;
SOKOLOV, A.V.; TURCHIN, F.V., prof.; SHKONDE, E.I., kand.,
sel'khoz. nauk; SHTERNBERG, M.B., kand. biol. nauk;
VOL'FKOVICH, S.I., akademik, red.; KORNEYEV, N.Ye., kand.
veter. nauk, red.; NAYDIN, P.G., prof., red.; PLESHKOV, B.P.,
kand. sel'khoz. nauk, red.; POPOV, I.S., akademik, red.;
ROMASHKEVICH, I.F., kand. sel'khoz. nauk, red.; RODE, A.A.,
prof., red.; ROZOV, N.N., prof., red. ~~FATUYEV, M.R. yinzh.~~,
red.

[Chemicalization of agriculture; scientific and technical
dictionary handbook] Khimizatsiya sel'skogo khoziaistva;
nauchno-tehnicheskii slovar'-spravochnik. Moskva, Nauka,
1964. 398 p. (MIRA 17:10)

1. Chlen-korrespondent AN SSSR (for Sokolov). 2. Vsesoyuznaya
akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for
Popov)

SOKOLOV, A.V., otv. red.; SHKONDE, E.I., kand. sel'khoz. nauk,
otv. red. Prinimal uchastiye ASKINAZI, D.L.,
red.; TROITSKIY, A.I., retsenzent; FRIDLAND, v.m.,
retsenzent

[Agrochemical characteristics of soils in the U.S.S.R.;
the Transcaucasian Republics] Agrokhimicheskaiia kharak-
teristika pochv SSSR; respublik i Zakavkaz'ia. Moskva,
Nauka, 1965. 319 p. (MIRA 18:5)

1. Akademiya nauk SSSR. Pochvennyy institut im. V.V.
Dokuchayeva. 2. Chlen-korrespondent AN SSSR (for Sokolov).

SHKONDIN, YE. A.

SHKONDIN, YE. A. -- "Foam "gliezh" and Foam Silicate "gliezh" and Their Use in Construction." Min Higher Education USSR, Central Asiatic Polytechnic Inst, Tashkent, 1956. (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No 44, October 1956

USSR

Method for determining total phosphorus in soil. E. I. Shkondl
(Pochvovedenie, 1954, No. 3, 73-77).—For precise work fusion of the
sample with alkali or decomposition with HF, HClO_4 , or H_2SO_4
+ HNO_3 is suitable. In simplified acid-digestion methods described
soil org. matter is decomposed by slow ashing with strong acids at
low temp. Decomposition of one mineral fraction of the soil by
repeated treatment with HNO_3 and subsequent oven-drying is
preferred to decomposition with aqua regia or HCl alone.

Soils & Fertil. (A. G. P.).

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SHKOP, Ya., inzh.; KOVBASYUK, V., inzh.; SEMOVICH, R., inzh.

New box loader. Avt.transp. 40 no.11:14-15 N '62.
(MIRA 15:12)
(Loading and unloading—Equipment and supplies)

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CIA-RDP86-00513R001549710010-3"

KUBENA, Lyudvig; SHKOP, Ya.F., insh. [translator]; LOSEV, V.S., nauchnyy red.; VASIL'YEV, L.V., nauchnyy red.; ROMANOV, B.V., red.; RAKOV, S.I., tekhn.red.

[Practical training of masons] Proizvodstvennoe obuchenie kamenshchika. [Translated from Czech] Moskva, Vses. uchebno-pedagog. izd-vo Trudrezervizdat, 1958. 155 p. (MIRA 12:1)
(Czechoslovakia--Masonry--Study and teaching)

SHKOP, Ya.F.

[Overall mechanization of loading and unloading operations
in container shops and shipment departments] Kompleksnaia
mekhanizatsiia pogruzochno-razgruzochnykh rabot v posudnykh
tsekhakh i ekspeditsiakh. Moskva, Tsentral'nyi nauchno-
tekhnicheskiy informatsii pishchevoi promyshl., 1963. 24 p.
(MIRA 17:4)

SHKOP, Ya.F.; FEL'DMAN, A.I.

[Equipment for malt production] Oborudovanie solodoven-
nogo proizvodstva. Moskva, TSentr. in-t nauchno-tekhn.
informatsii pishchevoi promyshl., 1963. 27 p.
(MIRA 17:9)

ROKHOVANSKIY, O. [Rochovansky, O.]; IOZIFEK, R. [Jozifek, R.]; SOVA, B.,
inzh.; SHKOP, Yaroslav Frantsovich, [translator]; GENIN, M.Ya., inzh.,
nauchnyy red.; DEMINA, G.A., red.; RAKOV, S.I., tekhn.red.

[Manual for plumbers on the installation of water, gas, and
waste-disposal systems] Slesar'-santekhnik po montazhu vodo-
provoda, kanalizatsii i gazoprovoda; uchebnik dlia vtorogo
goda obuchenija] Translated from the Czech. Moskva, Vse.
uchebno-pedagog.izd-vo Trudrezervizdat, 1958. 205 p. (MIRA 11:12)
(Plumbing)

Sokur, Ya.F.

Automatic VAM-6 bottling machine. Ferm. i spirit. prom. 30 no.5:
25-27 '64. (SRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut pivo-bezalkogol'noy i vinnoy promyshlennosti.

STEPANOV, Ivan Aleksandrovich; GALAEV, Petr Nikitich; SHKOP,
Yar., spets. red.; KOVALEVSKAYA, A.I., red.

[Continuous lines for bottling and sealing liquid foods and
beverages] Poustochnye linii i razviva i ukoparki pishchevykh
zidkostei. Minsk, Piatykhavie pravyshlennost', 1965.
316 p. (MIRA 18:11)

SHKOR, V.D.

The MS-20 type machine for dynamic balancing of parts. Biul.
tekh.-ekon.inform. no.1:37-39 '60. (MIRA 13:5)
(Balancing of machinery)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001549710010-3

SHKOR, V.D.

The MS-25 machine for dynamic balancing of rotating parts.
Biul.tekh.-tekhn.inform. no.7:27-29 '60. (MIRA 13:7)
(Balancing of machinery)

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CIA-RDP86-00513R001549710010-3"

SHKORBATOV, G.L.

Ecological and physiological characteristics and living conditions of related forms of fresh-water animals. Zool.zhur. 32 no.5:793-803 S-0 '53.
(MIRA 6:10)

1. Biologicheskiy fakul'tet Khar'kovskogo gosudarstvennogo universiteta im. A.M.Gor'kogo. (Fresh-water fauna)

SHKORBATOV, G.L.

Food reserves for fishes in small irrigation ponds. Trudy probl. i
tem. soveshch. no.2:138-146 '54. (MIRA 8:5)
(Ponds) (Fishes—Food)

SHKORBATOV, G.L.

Some ecological and physiological features of whitefish being
acclimatized in ponds of eastern Ukraine. Zool. zhur. 33 no.
6: 1325-1335 N-D '54. (MIRA 8:2)

1. Biologicheskiy fakul'tet Khar'kovskogo gosudarstvennogo
universiteta im. A.M.Gor'kogo.
(Ukraine--Whitefishes)

SHKORBATOV, L. L.

USSR/Biology - Physiology

Card 1/1 : Pub. 22 - 39/41

Authors : Shkorbatov, G. L.; Azanovich, L. P.; and Loscvskaya, G. V.

Title : Conditions of a medium and its effect on the oxygen demand of young carp

Periodical : Dok. AN SSSR 98/2, 311-312, Sep 11, 1954

Abstract : The conditions of a medium and its effect on the oxygen demand of young fish (carp) are discussed. Eight references: 7-USSR and 1-USA (1935-1953). Graphs.

Institution : A. M. Gorkiy State University, Kharkov

Presented by : Academician V. A. Engel'gardt, May 24, 1954

SHKORBATOV, G. L.

Experimental basis of the acclimatization of fishes [with summary
in English]. Zool. zhur. 36 no.2:230-237 F '57. (MIRA 10:6)

1. Biologicheskiy fakul'tet Khar'kovskogo gosudarstvennogo universiteta.
(Acclimatization) (Fishes)

SHKORBATOV, G.L.

Ecologico-physiological factors determining the acclimatization of
lavarets in Ukrainian waters. Uch. zap. KGU 84:81-99 '57.
(MIRA 11:11)

1. Kafedra hidrobiologii i ikhtiolodii Khar'kovskogo gosudarstven-
nogo universiteta.
(Ukraine--Whitefishes) (Acclimatization)

SHKORBATOV, G.L., kand.biol.nauk

Changes in the ecologico-physiological characteristics of fishes
during acclimatization. Trudy sov.Ikht.kom. no.8:303-306
' 58. (MIRA 11:11)

1. Kafedra ikhtiologii i gidrobiologii Khar'kovskogo universiteta
imeni A.M. Gor'kogo.
(Fishes--Physiology) (Acclimatization)

SHKORBATOV, G.L.; UMANSKAYA, M.A.; BESKROVNYY, A.M.

Intensity of oxygen consumption and some specific features of behavior in coregonid larvae. Nauch. dokl. vys. shkoly; biol. nauki no.4:35-37 '59. (MIRA 12:12)

1. Rekomendovana kafedroy gidrobiologii Khar'kovskogo gosudarstvennogo universiteta im. A.M. Gor'kogo.
(Respiration) (Larvae--Fishes) (Whitefishes)

SHKORBATOV, G.L.

Intraspecific physiological variability in aquatic poikilothermal
animals. Zool. zhur. 40 no.10:1437-1452 O '61. (MIRA 14:9)

1. Biological Faculty, State University of Khar'kov.
(Animals, Cold-blooded) (Adaptation (Biology))

SHKORBATOV, G.L.

Ecological and physiological variability and the problems of acclimatization of aquatic animals. Vop. ekol. 5:247-248 '62.
(MIRA 16:6)

1. Khar'kovskiy gosudarstvennyy universitet.
(Freshwater fauna) (Acclimatization)

GEL'FENBEYN, L.L.; SHKORBATOV, G.L.

Schools need one consolidated course in general biology. Biol.
v shkole no. 3:32-34 My-Je '63. (MIRA 16:10)

1. Khar'kovskiy gosudarstvennyy universitet.

SHKORBATOV, G.L.

Acclimatization of Corezonid fishes in the bodies of water of
Kharkov Province. Trudy Gidrobiol. ob-va 13:242-254 '63.
(MIRA 16:11)

I. Biologicheskiy fakul'tet Khar'kovskogo gosudarstvennogo
universiteta imeni A.M. Gor'kogo.

SHKORBATOV, G.L.

Stability of ecological and physiological adaptations in some
freshwater mollusks. Zool. zhur. 42 no.10:1462-1464 '63.
(MIRA 16:12)

1. Biological Faculty, State University of Kharkov.

SHKORBATOV, G.I.

Theory of acclimatization of aquatic animals. Zool. zhur. 43 no. 7:953-
964 '64. (MRA 17:12)

1. Biological Faculty, Khar'kov State University.

SURGBATOV, G.L.; KUDRYAVTSEVA, G.S.

Changes in the heat- and cold-resistance of fish tissues as
related to the temperature conditions of the environment,
Dokl. AN SSSR 156 no. 2:452-454 My '64. (MKh 17:7)

I. Khar'kovskiy gosudarstvennyy universitet imeni A.M.Ger'kogo.
Predstavлено akademikom Ye.N. Pavlovskim.

SHKORBATOV, G.L.

Intraspecific variability of oxypholia in freshwater
fishes. Gidrobiol. zhur. 1 no.5:3-8 '65.

(MIRA 18:11)

1. Khar'kovskiy gosudarstvennyy universitet.

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MATVEYEV, B.S.; SHKORBATOV, G.L.

Reviews. Zool.zhur. 44 no.10:1582-1583 '65.

(MIPA 18:11)

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CIA-RDP86-00513R001549710010-3"

SHKORBATOV, L.A.

Category: USSR/General Division. History. Classics. Personalities. A-2

Abs Jour: Referat Zh.-Biol., No :6, 25 March, 1957, 21284

Author : Shkorbatov, L.A.

Inst : not given

Title : On the History of Algology and Hydrobiology at Kharkov University

Orig Pub: Uch. zap. Kharkovsk. un-ta, 1955, 59, 123-160

Abstract: An important part in developing algology and hydrobiology in Kharkov University was played by Professors L.S. Tsenkovskiy, L.V. Reingard, V.M. Arnoldi, A.A. Korshikov and others. The initial period of algologic research in Kharkov is connected with the names of A.S. Piter (1830-1889) and G.F. Shperak (1845-1870); the latter began the study of algologic flora in the Black Sea in regard to classification, morphology and physiology. Tsenkovskiy (1822-1887) -- the founder of the Kharkov school of protistologists and

Card : 1/3

-2-

Category: USSR/General Division. History. Classics. Personalities. A-2

Abs Jour: Referat Zh.-Biol., No 16, 25 March 1957, 21284

microbiologists -- did much in the study of lower animals and plants (described a new group among mixomycetes, a new type in the rhizopod subclass, established the connection between sea radiolarians and sweet-water heliozoa, etc.); he worked on a method of preparing a vaccine against malignant anthrax, and widely applied the ontogenetic method in protistology. His successor in the chair of plant morphology and classification was Reinhard (1847-1920), who studied algal flora of sea and sweet-water reservoirs, mainly those of the Black Sea. Arnoldi's activity (1871-1924) was directed to algology-hydrobiology. In addition to cytologic-embryologic research on gymnospermous plants, Arnoldi paid close attention to the study of algae, their biology, classification, morphology, geographic prevalence, ecology, etc; he wrote a textbook, "Introduction to the study of lower organisms" (1900). He founded the Donets biological station at the Kharkov society

Card : 2/3

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of nature investigators. Korshikov (1889-1945), who directed the chair of lower plants from 1928 to 1941, was an exponent of the morphologic-classification trend. He stu-

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expended his efforts to establish their phylogenetic ties. Korshikov published two studies on sweet-water algae. The history, problems and scientific-pedagogic activities of the Donets hydrobiologic station are described (1914). The scientific topics of the station are described, which include problems of reservoir topology, regional limnology, productivity of ponds on collective farms, flora of reservoirs, toxicity of sewage water, etc.

Card : 3/3

-4-

Year: General Biology - General Hydrobiology.

B-2

Abs Jour : Ref Zhur - Biol., No 5, 1958, 19149

Author : Shkorobtsov, L.A.

Inst : -

Title : Results of Hydrobiological and Hydrochemical Study of the Molochnaya River and its Tributaries.

Orig. Pub : Vsesoyuz. Nauchno-tekhnichesk. zhurn. 1958, 27, 7-21

Authorship: I.I. Chikatilov.

Title: Mineral Biology - General Hydrobiology.

B-6

Abstr Jour : Ref Zhur - Biol., No 5, 1953, 19141

Author : Chikatilov, I.I.

Inst : -

Title : Plankton of Lake Beloye of the Zmiev Region of the Kharkov District (According to Data of Multiple Repeat Investigations).

Orig Pub : Uch. zap. Kharkovsk. un-ta, 1956, 67, 157-210

Abstract : A description of the dynamic changes in composition and plankton life in various years from 1913 to 1943. 269 species are found in phytoplankton, the overwhelming majority of them typical phytoplanktons, ~50 species of which are found each year. Zooplankton is quantitatively poor. The lake flowering is caused yearly by blue-green algae, but its tempo and character were not alike in different years. Lake Beloye possesses an eutrophic character. Results of quantitative accounting of phyto-

Cont. 4/2

DEDUSENKO-SHCHEGOLEVA, N.T., dotsent; MATVIYENKO, A.M., dotsent;
SHKORBATOV, I.A., dotsent; POLYANSKIY, V.I., prof., nauchnyy
red.; SAVICH, V.P., prof., zasluzhennyy deyatel' nauki RSFSR,
otv.red.; KRUGLIKOV, N.A., tekhn.red.

[Guide to fresh-water algae of the U.S.S.R. in fourteen parts]
Opredelitel' presnovodnykh vodoroslei SSSR; v chetyrnadtsati
vypuskakh. Red.kollegiia M.M.Gollerbach i dr. Moskva, Izd-vo
Akad.nauk SSSR. Pt.8.[Green algae; class Volvocinae] Zelenye
vodorosli; klass vol'voksovye. 1959. 229 p. (MIRA 12:11)

1. Sotrudniki Kafedry nizshikh rasteniy Khar'kovskogo gosudarstven-
nogo universiteta im. A.M.Gor'kogo (for Dedusenko-Shchegoleva;
Matviyenko, Shkorbatov). 2. Zaveduyushchiy Otdelom sporovykh
rasteniy Botanicheskogo instituta im. V.L.Komarova Akademii nauk
SSSR (for Savich).

(Algae)

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SHKORBATOV, L.A.

In memory of Nina Tymofiiivna Didusenko-Shchoholeva, Ukr. bot.
zhur. 19 no.4:100-102 '62. (MIRA 15:9)
(Didusenko-Shchoholeva, Nina Tymofiiivna, 1892-1961)

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CIA-RDP86-00513R001549710010-3"

SVESHNIKOV, G.B.; DOBYCHIN, S.L.; SHKORBATOV, S.S.

Possible role of electrochemical solution of sulfides in the
formation of aqueous halos of nickel dispersion. Uch. zap. LGU
no.286:142-148 '60.
(Geochemical prospecting)
(Nickel ores)

SHKORBATOV, S.S.; SVESHNIKOVA, G.I.; PERFILOVA, A.P.

Studying the magnetic properties of rocks in the Monchegorsk
region. Vest. LGU 19 no.12:23-31 '64 (MIRA 17:8)

SHKORBATOV, S.S.; PERFILOVA, A.P.

Structure of the main gabbro intrusion in the Monche and Chuna
tundras. Uch. zap. LGU no.324:337-341 '64.

(MIRA 18:4)

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СЕВЕРНЫЙ, + + +

"On the basis of the USSR Academy's local sections work in the study of tick
typhus and plague in Khabarovsk province."

Zhur. Mikrobiol., Epidemiol., i Immunol., No. 1-2, 1954.

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001549710010-3"

SHKORBATOV, V. I.

FA 51T51

USSR/Medicine - Meningitis Mar. 1948
Medicine - Sulfanilimide and Sulfanilamide
Derivatives

"Prophylactic Application of Sulfidine in Epidemic Cerebrospinal Meningitis," V. I. Shkorbatov, T. T. Kharchenko, Epidemiol Sec, Far Eastern Inst Experimental Med, Khabarovsk, 1 p

"Sovets Medits" No 3

Presents collection of data on use of sulfidine against epidemic cerebrospinal meningitis to show that this preparation is very effective prophylactic substance.

51T51

SHKORBATOV, Yu.L.

Survey of branchiopod crustaceans in intermittent bodies of
water. Uch.zap. KGU 33:241-250 '50. (MIRA 11:11)

1. Kafedra hidrobiologii i ikhtiolodii Khar'kovskogo gosudarstven-
nogo universiteta (zaveduyushchiy kafedroy - dets. A.D. Malovskiy).
(Northern Donets Valley--Branchiopoda)

SHVORBATOV, Y.⁴ L.

Mbr. Khar'kov State Univ. im. A. M. Gorkiy, -cl950-. "The Effect of Environmental Conditions on the Physiological Peculiarities of Similar Forms of Fresh Water Mollusks," Dok. AN, 70, No. 6, 1950.

ACC NR: A16034096

(N)

SOURCE CODE: UR/0089/66/021/004/0292/0292

AUTHOR: Kartovitskaya, M. A.; Rubanov, S. M.; Shkorbatova, L. S.

ORG: none

TITLE: Efficiency of boration of metal-water shields

SOURCE: Atomnaya energiya, v. 21, no. 4, 1966, 292

TOPIC TAGS: reactor shielding, borate, boron compound, radiation dosimetry

ABSTRACT: This is a summary of paper No. 100/3736, submitted to the editor and filed but not published in full. It deals with the dependence of the weight and dimensional characteristics of iron-water and lead-water shields on the content of boron and on the place where the boron is introduced in the shield. Boration is shown to lead to redistribution of the components of the total dose, but is effective only up to 0.5 wt.% of boron in the case of lead-water shields. The reduction in thickness is on the order of 1 - 3% in the case of lead. The reduction of weight is 1.5 - 2% in the case of lead and can reach 9% in the case of iron. The best effect is shown to be produced when the first shielding layers are borated. In the heterogeneous lead-water shields, boration has little effect, and in iron shields it reduces their weight by 5%. Blocking the iron or lead layers with boron carbide has the same effect as boration of the heavy component.

SUB CODE: 18/ SUBM DATE: 12May66/ ORIG REF: 001

UDC: 621.039.58

Card 1/1

L 28389-66 EPF(n)-2/EWA(h)/EWT(m)/ETC(f)/EWG(m)/EWP(t)/ETI LIP(c) NY/JD/JG
ACC NR: AP6001796 SOURCE CODE: UR/0089/65/019/006/0531/0532

AUTHOR: Artem'yeva, N. A.; Popkov, K. K.; Rubanov, S. M.;
Shkorbatova, L. S.

40
B

ORG: None

TITLE: Applicability of various spherical-harmonic approximations to
calculations of neutron passages through shielding /9

SOURCE: Atomnaya energiya, v. 19, no. 6, 1965, 531-532

TOPIC TAGS: nuclear reactor shield, neutron shielding, neutron flux

ABSTRACT: An abbreviated version of the original paper is presented.
The accuracy of multigroup approximations of P_1 -, P_2 - and P_3 -orders for
analyzing the neutron flux distributions in various media was investi-
gated in the original paper. The age-diffusion approximation was also
considered. Theoretical calculations were compared with experimental
data obtained on space-energy distributions of neutron fluxes. An 18-
group system was used for calculating P_1 -, P_2 - and P_3 approximations.
A 7-group system was used for age-diffusion approximations. Shielding /9
compositions containing water, graphite, boron carbide, iron, lead and
various homogeneous and heterogeneous mixtures were considered. It was
concluded that by using spherical-harmonic method the calculations

UDC: 539.125.52

Card 1/2

L 28389-66

ACC NR: AP6001796

could be limited by P_3 -approximations. The P_1 -approximation could be applied only for shielding thicknesses not exceeding 5 to 8 free-path lengths. It was also proven that the shielding functionals for materials of heavy and middle atomic weights were determined by neutrons of intermediate energy. A satisfactory coincidence in distribution of fast neutron fluxes was obtained by applying P_2 - and P_3 -approximations to heterogeneous compositions. This coincidence effect was still better for moderated and thermal neutrons.

SUB CODE: 18 / SUBM DATE: 15June65 / ORIG REF: 003 / OTH REF: 000

Card 2/2 LU

KHAPLANOV, Mikhail Grigor'yevich; ROZHANSKAYA, N.N., otv.red.;
SHKORINOV, V.P., red.; PAVLICHENKO, M.I., tekhn.red.

[Theory of functions of complex variables] Teoriia funktsii
kompleksnogo peremennogo; kratkii kurs. Rostov-na-Donu, Izd-vo
Rostovskogo univ., 1959. 193 p.
(MIRA 14:2)
(Functions of complex variables)

CHAVDAROV, S.S., otv. red.; SVECHNIKOV, A.M., red.; CHASOVITIN, Yu.K.,
red.; SHKORINTOV, V.F., red.; PAVLICHENKO, M.I., tekhn. red.

[Reports of the Scientific Symposium on the Ionosphere] Doklady;
V razdel programmy MGG (ionosfera). Rostov-na-Donu, Izd-vo Rostovskogo
univ., 1961. 149 p. (MIRA 14:12)

1. Nauchnyy simpozium po ionosfere, Rostov-on-Don, 1960.
(Ionosphere--Congresses)

KOVALENKO, P.N.; BAGDASAROV, K.N.; OSIPOV, O.A., dots., otv. red.;
SHKORINOV, V.P., red.; PAVLICHENKO, M.I., tekhn. red.

[Physicochemical methods of analysis; practical handbook] Fiziko-
khimicheskie metody analiza; prakticheskoe rukovodstvo. Rostov-na-
Donu, Izd-vo Rostovskogo univ., 1962. 349 p. (MIRA 15:6)
(Chemistry, Analytical) (Electrochemical analysis)

MIKHALEVSKIY, Vadim Sergeyevich; IVANOV, V.N., dots., otv. red.;
SHKORIINGV, V.P., red.

[Principles of the theory of superhigh-frequency delay
systems] Elementy teorii sverkhvysokochastotnykh za-
medliaushchikh sistem. Rostov-na-Donu, Izd-vo Rostov-
skogo univ., 1964. 187 p. (MIRA 17:6)

SHKOROPAD, D.Ye., kand.tekhn.nauk

Using the sedimentometric method for the determination of dispersity
in designing settling centrifuges. Trudy NIIKHIMMASH no. 29:20-24
'59.

(Centrifuges)

(MIRA 14:5)

SHKOROPAD, D.Ye., kand.tekhn.nauk

Modeling settling centrifuges. Trudy NIIKHIMMASH no. 29:25-33 :59.
(MIRA 14:5)
(Centrifuges)

SHKOROPAD D.Ye.
SOKOLOV, V.I., doktor tekhnicheskikh nauk, professor; SHKOROPAD, D.Ye.,
inzhener; ZHIGALOV, S.F., doktor tekhnicheskikh nauk, professor,
retsenzent; SCHEPKIN, S.I., professor, redaktor; MODEL, B.I.,
tekhnicheskiy redaktor.

[Automatic and continuous centrifuges] Avtomaticheskie i nepreryvno-
deistvuyushchie tsentrifugi. Moskva, Gos. nauchno-tekhn. izd-vo ma-
shinostroit. i sudostroit. lit-ry, 1954. 341 p. (MLRA 7:11)
(Centrifuges)

SHKROFAD, D. YE.

SHKROFAD, D. YE. -- "Investigation of the Theory of Precipitating Centrifugation." Min Higher Education USSR, Moscow Institute of Chemical Machinebuilding, Moscow, 1956. (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No 43, October 1956, Moscow

AID P - 5080

Subject : USSR/Engineering

Card 1/1 Pub. 128 - 9/26

Author : Shkoropad, D. Ye.

Title : Letter to the editor

Periodical : Vest. mash., 5, 28, My 1956

Abstract : The author presents a list of errors discovered in his book "Automatic and Continuous Centrifuges", 1954.

Institution : None

Submitted : No date

SOLODOV, A.I., inzh.; SHKOROPAD, D.Ye., kand.tekhn.nauk

Hydrodynamic characteristics of a centrifugal extractor.
Khim. mash. no. 6317-21 N-D '61. (MIRA 15:2)
(Extraction apparatus)
(Hydrodynamics)

SHKOROPAD, D.Ye.; LYSKOVTSOV, I.V.; REZNIK, V.M., inzh., retsenzent;
KARGANOV, V.G., inzh., red.; VLADIMIROV, L.A., tekhn. red.

[Centrifugal liquid extractors] TSentrobezhnye zhidkostnye ek-
straktory. Moskva, Mashgiz, 1962. 215 p. (MIRA 16:3)
(Extraction apparatus)

SHKCRUPEYEV, I.S., inzh.; GOL'DENBERG, L.L., inzh.; SIRKES, P., red.;
KURMAYEVA, T., tekhn. red.

[Development of the machinery and electric equipment industries
in the Moldavian S.S.R.] Razvitie mashinostroitel'noi i elektro-
tekhnicheskoi promyshlennosti v Moldavskoi SSR. Kishinev, Gos.
izd-vo "Kartia moldoveniasko," 1960. 61 p. (MIRA 15:4)
(Moldavia—Machinery industry)
(Moldavia—Electric equipment industry)

DIBNER, Ye.E., red.; LISTENGURT, M.A., st.nauchn.sotr., kand.sel'khoz.nauk, red.; MEYSAKHOVICH, Ya.A., kand. sel'khoz. nauk, red.; TARASOVA, A.Yu., red.; FILIMONOV, S.I., red.; SHKORUPEYEV, I.S., red.; SHLYAKHOVOY, Ye.M., red.; SININA, V., red.; PULONSKIY, S., tekhn. red.

[Mechanization of work in plant protection] Mekhanizatsiya rabot po zashchite rastenii; sbornik trudov. Kishinev, Izd-vo sel'khoz. lit-ry, 1961. 187 p. (MIRA 16:2)

1. Nauchno-tehnicheskoye soveshchaniye po voprosam konstruirovaniya mashin dlya zashchity plodovykh kul'tur i vinograda. Kishinev, 1960.
2. Predsedatel' Moldavskogo respublikanskogo pravleniya Nauchno-tehnicheskogo obshchestva mashinostroitel'noy promyshlennosti, zamestitel' predsedatelya sovnarkhoza Moldavskoy SSR (for Shkorupeyev).
3. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity rasteniy (for Meysakhovich).
4. Moldavskaya stantsiya zashchity rasteniy (for Listengurt).
5. Zamestitel' nachal'nika Gosudarstvennogo spetsial'nogo konstruktorskogo byuro po mashinam dlya mekhanizatsii rabot v sadakh i na vinogradnikakh (for Dibner).
6. Nachal'nik laboratorii ispytaniy mashin Gosudarstvennogo spetsial'nogo konstruktorskogo byuro po mashinam dlya mekhanizatsii rabot v sadakh i na vinogradnikakh (for Shlyakhovoy).
7. Nachal'nik issledovatel'skogo otdela Gosudarstvennogo spetsial'nogo konstruktorskogo byuro po mashinam dlya mekhanizatsii rabot v sadakh i na vinogradnikakh (for Filimonov).

(Spraying and dusting equipment)

SHKORUPILO, G.

Current questions on work norms and wages. Sov.profsoiuzy
16 no.5:34-37 Mr '60. (MIRA 13:3)
(Agriculture--Production standards)
(Wages)

SIKORUPILO, G.

The new wage system on state farms. Sov. pressinuz 17 no. 43-40
F '61. (MIA L1:2)

(Agricultural wages)

SHKORUPILO, G.

Those earn more who work better. Sov.profsoiuzy 18 no.12:19-21
Je '62. (MIRA 15:6)

1. Zamestitel' zaveduyushchego otdelom truda i zarabotnoj platy
Vsesoyuznogo tsentral'nogo soveta profsoyuzov.
(Agricultural wages)

SHKOTOV, A.

Over the wide Volga River.... Sov.profsoiuzy 7 no. 9:37-38
May '59. [REDACTED] (MIRA 12:8)

1. Žaveduyushchiy otdelom kul'turno-massovoy i fizkul'turnoy
raboty Gor'kovskogo oblssovprofa.
(Gorkiy--Vacations, Employee)

SHKOTOV, V.

Training for a second and third trade. Prof.-tekh. obr. 11 no.4:
28 Jl '54. (MLRA 7:9)

1. Nachal'nik otdela truda i zarplaty tresta (g. Stalingrad)
(Technical education) (Petroleum industry)

SHKOVA-UL'YANOV, V. A.

Uzhgorod State Univ.

" Possibility of Using the Equilibrium Spectrum (Track Length) of Protons
for Measurement of the Excitation Functions for Photoneutron Production by
High-Energy Electrons,"

paper submitted at the A-U Conf on Nuclear Reactions in Medium and Low Energy
Physics, Moscow, 19-27 Nov 57.

SHKOVRAKEK, V.

A year's work of the hygiene and epidemic control service in
Czechoslovakia. Gig.i san. no.12:32-34 D '53. (MIRA 6:12)

1. Glavnnyy gigiyenist Ministerstva zdravookhraneniya Chekhoslo-
vatskoy narodnoy demokraticeskoy respubliki.
(Czechoslovakia--Public health) (Public health--Czecho-
slovakia)

SHKOVRAÑEK, Vilem

Fiftieth birthday of the outstanding Czech epidemiologist Professor
Karel Raška. Zhur.mikrobiol., epid.i immun. 30 no.12:131 D '59.
(MIRA 13:5)
(RASKA, KAREL, 1919-)

GRUZIN, P.L., doktor fiz.-mat. nauk, otv. red.; BRYANTSEVA, V.P., inzh., ved. red.; SHKOVSKAYA, I.Yu., inzh., ved. red.; SINITSYN, V.I., inzh., nauchnyy red.; LADONINA, L.V., tekhn. red.

[Use of radioactive isotopes and nuclear radiations in hydraulic engineering and construction] Primenenie radioaktivnykh izotopov i iadernykh izluchenii v gidrotekhnike i stroitel'stve. Moskva, (Perevodoi nauchno-tehnicheskii i proizvodstvennyi opyt. Tema 19) No.14. 1960. 35 p. (MIRA 15:3)

1. Moscow. Institut tekhniko-ekonomicheskoy informatsii.
(Construction industry) (Hydraulic engineering)
(Radioactive substances—Industrial applications)

L 12657-65 EWT(m)/EPF(n)-2/EWP(t)/EWP(b) Pu-4 ASD(m)-3/AS(mp)-2/ASD(a)-5/
SSD/AFVI/ASD(p)-3/ASD(d)/ESD(gs) JD/JG/MIK

ACCESSION NR: AT4046119

S/0000/63/000/002/0061/0066

B

AUTHOR: Shkovskaya, R. M.; Sukhanova, I. M.

TITLE: Preparation of high-purity lithium and cesium salts

SOURCE: USSR. Gosudarstvennyy komitet khimicheskoy i naftyanoy promyshlennosti. Promyshlennost' khimicheskikh reaktivov i osobo chistyykh veshchestv (Industry of chemical reagents and extra pure substances); Informatsionnyy byulleten', no. 2 Moscow, IREA, 1963, 61-66

TOPIC TAGS: lithium, cesium, alkali metal, iron, heavy metal impurity, diethyl-dithiocarbamate, activated charcoal, fractional crystallization, rubidium, potassium, alkali polyhalide, alkali metal purification

ABSTRACT: For the purification of the soluble salts of alkali metals from iron and heavy metal impurities, the authors have introduced a method based on complex formation between these impurities and sodium diethyldithiocarbamate followed by adsorption of the formed complex on activated charcoal. This method is inexpensive, simple and yields high-purity ($1-5 \times 10^{-5}\%$) products. Data for lithium nitrate and sulfate are presented. For the removal of alkali metal impurities from cesium salts, the method of multiple recrystallization of cesium nitrate has been introduced. This method is the simplest and yields very pure cesium salts with an

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L 12657-65

ACCESSION-NR: AT4046119

alkali metal content of less than 0.001-0.002%. The separation of the Cs-Rb and Rb-K pairs is very difficult because of the small difference in the radii of the rubidium, cesium and potassium ions and the isomorphism of their compounds. For this purpose, fractional crystallization based on the different solubility of the analogous salts of these metals is used. Comparison of the tabulated data obtained by the chloro-bromo-iodide method with that obtained by the polyhalide method shows that the latter is the only method which gives high-purity rubidium and cesium after the removal of Li, Na and K. The fractional crystallization of rubidium sulfate gave rubidium salts with a cesium content of less than 0.005%. Data obtained by the recrystallization of rubidium sulfates to remove cesium are tabulated. An industrial method for separating potassium from rubidium is still in the experimental stage. Orig. art. has: 3 tables and 1 chemical equation.

ASSOCIATION: none

SUBMITTED: 27Nov63 ENCL: 00

SUB CODE: IC, GC

NO REF SOV: 008 OTHERS: 005

Card 2/2

SHKOVSKIY, G.S. (gor. Kusin, Chelyabinskoy obl., rayonnaya bol'nitsa)

Hydronephrosis in a one-and a-half-year-old child in the presence
of ureteral occlusion. Vest. khir. 82 no.6:123 Je '59. (MIRA 12:8)

1. Iz khirurgicheskogo otdeleniya (zav. - G.S. Shklovskiy) Kusinskoy
rayonnoy bol'nitsy Chelyabinskoy oblasti.
(KIDNEYS--DISEASES)

SHKOVSKIE, I. S.

Source Information

U.S. Ambassador to Bulgaria, the Bulgarian News, "Boing" Aviation
Agency of Bulgaria, 1972.

Ambassador to the USSR, Capital New York, Moscow
July 12, 1972, Vol. 3, pp. 470-480

U.S. Embassy Dir. of Economic Affairs
Circular 1970, Vol. 3, No. 7, p. 34

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001549710010-3

SHKOVSKIY, I., prof.

Astronomy in 20 years. Nauka i zhizn' 30 no.9:55-60 S '63.
(MIRA 16:10)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001549710010-3"

SHKLOVSKIY, M. I.

Aug 1947

USER/Metals
Alloys, Magnetic
Magnesium Alloys

"Magnetic Properties of Magnesium-Nickel," M. I.
Shklovskiy, 3 pp

"Elektrichesko" No 8

Experiments were conducted on magnesium-nickel alloys which contained, in addition, 24 % Co, 8 % Al, 14 % Ni, 3.5 % Cu. Graphs and tables of results which were obtained in experiments. It was discovered that Sanford's curve could not be adapted to magnesium-nickel type alloys. The magnetic texture of magnesium-nickel alloys show evidence of 22782

Aug 1947

USER/Metals (Contd)
Alloys, Magnetic
Magnesium Alloys

anisotropic hysteresis with relation to the angle between direction of magnetization and application of the thermal treatment by poles.

22782

GUDIK, G.V. (Krivoy Rog); KARAZIN, V.I. (Krivoy Rog); SHKOVYRA, G.P. (Krivoy Rog)

Some features of the reduction of calcined pellets of concentrates from the Southern Mining and Dressing Combine by gaseous reducing agents. Izv. Akad. SSSR. Otd. tekhn. nauk. Met. i topl. no.1:147-148
Ja-F '61. (VINITI 14:2)

(Iron--Metallurgy)

SHKPADYUK, F.Z.

✓ 6096. Treatment of typhoid and paratyphoid patients with antibiotics sintomycin and levomycetin. F. Z. Shkpaduk Zdravookh. Kazakhstan, 1955, No. 9, 17-23; Referat. Zh. Biol., 1956, Abstr. No. 83897.—114 typhoid patients, 18 cases of paratyphoid A and 8 cases of paratyphoid B were treated with sintomycin (S) and levomycetin (L). S and L were administered orally at a dose of 0.5 g. per 4 hr. for 3-5 days. The daily dose was then gradually reduced to 2-1 g., the total quantity of L or S being on the average 20-30 g. Treatment with S gave a good and satisfactory result in 64.6% of the patients, and with L, 79.6%. The good result of the treatment showed itself by a lowering of the temp. 2-4 days after the commencement of the treatment, with improvement in the general condition and feelings, appetite and sleep of the patient, and shortening of the fever to an average of 10.5 days. Complications (bronchial pneumonia, etc.) were seen with early treatment (between the 10th and 17th days of illness). The relapses that occurred took a fairly easy course. The usual accessory phenomena appeared in 48 patients of the 138, and more often in those treated with S. The average doses of L and S did not cause a depression of leucopoiesis or agranulocytosis. There were no deaths. (Russia)

T. R. Paras

SHKRAB, M. S. and S. M. GURVICH, eds.

Vodopodgotovka i vodnyi rezhim v promyshlennykh kotel'nykh. Moskva, Gosenergoizdat, 1950. 302 p. illus.

Feed-water treatment and operating conditions in industrial boiler rooms.

DLC: TJ377. G8

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

NIKITINA, L.M.; KUCHMEL', M.A.; Prinimali uchastiye: PARFENOVA, G.F.,
starshiy mekhanik; SHKRABATOVSKAYA, T.F., starshiy mekhanik

Mass capacity and the mass transfer coefficient of certain
granular materials. Inzh.-fiz.zhur. 5 no.8:48-52 Ag '62.
(MIRA 15:11)

1. Energeticheskiy institut AN BSSR, Minsk.
(Mass transfer) (Grain)

L 53999-65

ACCESSION NR: AP5017364

UR/0250/64/008/008/0523/0525

AUTHOR: Nikitina, L. M.; Melikhova, A. N.; Shkrabatovskaya, T. F.

7

B

TITLE: Equilibrium moisture content and coefficients of mass transfer of sawdust

SOURCE: AN BSSR. Doklady, v. 8, no. 8, 1964, 523-525

TOPIC TAGS: mass transfer, isothermal transformation, forest product

Abstract: The use of sawdust as a standard in the determination of coefficients of mass transfer by the method of nonsteady-state flux of matter under isothermal conditions has an advantage over filter paper, in that the sawdust can provide better contact with flat rough surfaces, such as construction materials. Pine shavings were investigated: the sorption capacity of the sawdust as a standard material was studied, and it was calibrated according to filter paper. Sulfuric acid was used in concentrations: 82%, 60%, 50%, 40%, 30% and 20% corresponding to air relative humidities of 0%, 16.75%, 36.5%, 56.5%, 74.75%, and 88%. In addition, two of the beakers into which glass weighing bottles with the test materials were lowered were filled with distilled water, corresponding to a relative humidity of 100%. The pine shavings were found to be highly hygroscopic (maximum specific sorption mass content at room temperature 0.3 kg/kg). A comparison of data for the same

Card 1/2

L 53999-65

ACCESSION NR: AP5017364

specific mass content but different experimental temperatures indicated that the potential of mass transfer and coefficient of potential conductivity increase with increasing temperatures, while the value of the average specific isothermal mass capacity decreases. Orig. art. has 1 graph and 1 table.

ASSOCIATION: Institut teplo-i massoobmena AN BSSR (Institute of Heat and Mass Exchange, AN BSSR)

SUBMITTED: 22Nov63

ENCL: 00

SUB CODE: TD, LS

NO REF SOV: 004

OTHER: 000

JPRS

Doc
Card 2/2

-5(2), 18(6)

AUTHORS:

Mikheyeva, V. I., Dymova, T. N.,
Shkrabkina, M. M.

SOV/78-4-4-2/44

TITLE:

Preparation of Sodium Hydride (O poluchenii
sodii vodivaya)

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 4,
pp 709-717 (USSR)

ABSTRACT:

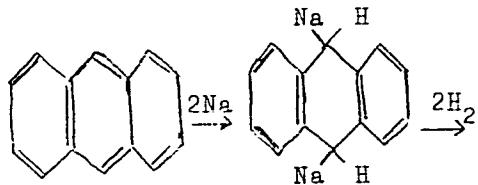
The conditions for a rapid synthesis of sodium hydride are given. Apparatus for carrying out the hydrogenation of sodium under static conditions and by using circulating hydrogen are given in figures 1 and 2. The experiments showed that under static conditions of 200 to 400° only trace amounts of sodium hydride are formed. The reaction of sodium with hydrogen in circulating hydrogen and in the presence of mineral oils and their aromatic fractions led to the formation of sodium hydride with a purity of 97 %. The method is recommended for producing sodium hydride in technical quantities. The synthesis of the sodium hydride was carried out with an addition of 0.5 - 1 % (relative to the weight of sodium) mineral oil and under a hydrogen pressure of 2 atmospheres

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Preparation of Sodium Hydride

SOV/78-4-4-2/44

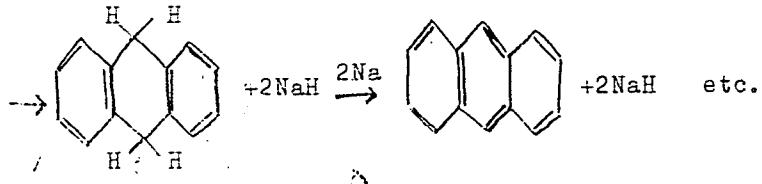
absolute pressure at 250 - 270° in a reactor utilizing a mechanical stirrer (stirring velocity of 300 rpm). The process produces a product of 93 % sodium hydride in three hours. Using a 0.25 - 0.5 % aromatic catalyst 97 % sodium hydride was prepared under the same conditions. Table 2 gives a complete review of the yields given by various reactions. The effect of the catalyst added to the hydrogenation of the sodium is indicated in Figure 5. The activating effect of the aromatic substances is discussed, and it is assumed that these molecules provide a locus at which the sodium and hydrogen become proximally attached and react together:



Card 2/3

Preparation of Sodium Hydride

SOV/78-4-4-2/44



There are 5 figures, 2 tables, and 42 references, 7 of which are Soviet.

SUBMITTED: January 27, 1958

Card 3/3

A1859
S/078/62/007/003/003/01
B110/B138

11.2222
11.1240

AUTHORS:

Mikheyeva, V. I., Shkrabkina, M. M.

TITLE:

Potassium - hydrogen interaction

PERIODICAL:

Zhurnal neorganicheskoy khimii, v. 7, no. 3, 1962, 463 - 468

TEXT: Potassium hydride was synthesized from the elements, (1) under static conditions and normal pressure, and (2) from compressed hydrogen by mechanical stirring and the addition of activators. The products which are formed react with water as follows: $\text{KH} + \text{H}_2\text{O} \rightarrow \text{KOH} + \text{H}_2$; $\text{K} + \text{H}_2\text{O} \rightarrow \text{KOH}$. If a = weighed portion in g; $v = \text{H}_2$ volume under normal conditions in cc; $b = \text{KOH}$ in g; $x = \text{K}$ content; $y = \text{KH}$ content, and $z = \text{KOH}$ content, one obtains:

$$\begin{aligned}x + y + z &= a \\ \frac{0.5x}{39} + \frac{y}{40} &= \frac{v}{22414} \\ \frac{56x}{39} + \frac{56y}{40} + z &= b\end{aligned}$$

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Potassium - hydrogen interaction

0.2 - 0.3 g of electrolytic potassium (98.5 % K) was hydrogenated in an iron boat inside a quartz tube heated in a tubular furnace using electrolytic H_2 freed from O_2 at 400 - 500°C over copper filings, and from H_2O by freezing out in liquid N_2 , until the H_2 pressure stopped dropping. KH condensed in the form of white, needle-shaped crystals. H_2 absorption began at 180°C, but only became significant above 300°C. The KH/H ratio grew from 2% at 340°C to 18.1% at 410°C. At 427°C, the KH dissociation tension is equal to atmospheric pressure, the K content grows while the KH content falls, and the hydride turns gray. At 450 - 470°C, the K vapors react with glass. The optimum temperature is 400°C, when the KH content is at least 98%, which corresponds to a hydride yield of 18%. With continuous agitation, interaction takes place throughout the metal mass. According to $\log P_{\text{KH}} = -6175/T + 11.69$, the dissociation tension of KH reaches atmospheric pressure at 427°C. Therefore, up to 400°C 3 - 5 atm H_2 pressure are sufficient to suppress the dissociation. This can be done in an autoclave with a sealed agitator. 5 - 10 g of K was put in an autoclave with dry N_2 . H_2 was blown through and the agitator, rotating at 300 - 400 rpm,

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Potassium - hydrogen interaction

was switched on at the melting point of K (68°C). Full hydrogenation was achieved by adding at least 1 % lubricating oil (industrial No. 30) or 0.3 - 0.5 % of the benzene fraction from that oil. $200 - 250^{\circ}\text{C}$ and 1.5 - 2 hrs are optimum. The resulting dark-gray, almost black powder with ~95% of KH ignites with the least trace of moisture, probably due to the existence of organopotassium intermediates. At 1500 rpm hydrogenation takes place faster, throughout the mass, and without additions, to yield a fine, light gray powder (97 % of KH) which is more resistant to moisture and air. Optimum conditions: 1500 rpm, 250°C , 1-3 atm, and 10 min. The white, needle-shaped crystals formed at $300 - 400^{\circ}\text{C}$ are produced by interaction of K vapors with hydrogen. The KH yield is higher than NaH, with or without stirring. At 1500 rpm, K is quantitatively hydrogenated in 10 min, Na not before 20 - 25 min, since the formation heats are $\Delta H_{\text{KH}} = -15.16 \text{ kcal/mole}$; $\Delta H_{\text{NaH}} = -13.60 \text{ kcal/mole}$, the vapour pressures at 440°C are 12 mm Hg for KH and 1 mm Hg for NaH. Due to the greater difference of the thermal expansion coefficient of hydrides and metals ($\alpha_{20-400}^{\text{KH}} = 36 \cdot 10^{-6}$; $\alpha_{0-60}^{\text{K}} = 83.8 \cdot 10^{-6}$; $\alpha_{20-400}^{\text{NaH}} = 64.0 \cdot 10^{-6}$; $\alpha_{0-90}^{\text{Na}} = 72 \cdot 10^{-6}$), the surface film

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Potassium - hydrogen interaction

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of potassium is destroyed, and hydrogenation is thus intensified. There are 3 figures, 3 tables, and 18 references; 3 Soviet-bloc and 15 non-Soviet-bloc. The four most recent references to English-language publications read as follows: H. L. Kansley, Chem. Eng. News, 23, 1332 (1945); A. M. Muckenfuss, US Patent 2073273; W. H. Schechter, U. S. Patent 2929676; March 22, 1960; C. E. Messer et al. J. Amer. Chem. Soc., 77, 4524 (1955). ✓✓

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S/078/62/007/010/007/008
B144/B186

AUTHORS: Mikheyeva, V. I., Shkrabkina, M. M.

TITLE: Solid solutions in the systems NaOH - NaH and KOH - KH

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 10, 1962, 2411-2418.

TEXT: The thermographic and x-ray analyses of the systems NaOH- NaH (NaH maximum 60 %) and KOH- KH (KH maximum 48 %) showed that with rising hydride content the melting point rose, but the temperature of the polymorphic decomposition of hydroxides dropped. The melting diagrams show a peritectic with a limited range of solid solutions. (1) NaOH - NaH: a homogeneous range of solid α -solutions is found at 20°C up to 18 % NaH, and at 200°C up to 30 % NaH. Above 40 % NaH, the structure is heterogeneous, and an endothermic effect at 445°C indicates intense dissociation of NaH. (2) KOH - KH: Solid solutions are formed at 20°C up to 14 % KH, and at \sim 220°C in systems with up to 30 % KH. With more than 30 % KH, the two-phase melts dissociate intensely at 470°C. It has not been clarified whether and how the components of these systems react with each other; no chemical reaction seems to take place up to 500 - 550°C. The thermal

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